

# EES-KH25 Knight Guard Knight Guard LED Small Slimline Area, Wall, and Flood Light



## Project Information

Project Name:	Fixture Type:
Complete Catalog #:	Date:
Comments:	

The EnviroLux Large Slimline area light With Knight Guard Technology is designed to produce less than 2 percent blue light and to specifically to replace incumbent Low Pressure Sodium light sources and produce higher efficiency than Amber light sources. Typical area lighting applications include retail centers, industrial parks, airports, and office buildings, close to observatories and beaches where less than 2 percent blue light for environmental lighting codes apply. Mounting heights of 24 to 40 feet can be used based on light level and uniformity requirements.

## Specifications and Features:

### Housing:

Die Cast Aluminum Housing and Front Frame, Integral Heat Sinking and Driver Compartment. Photocell Adaptable. Nickel-Plated Stainless Steel Hardware.

### Listing & Ratings:

ETL: Listed for Wet Locations, ANSI/UL 1598, 8750 IP66 Sealed LED Compartment.

### Finish:

Textured Architectural Bronze Powdercoat Finish Over a Chromate Conversion Coating. Custom Colors Available Upon Request.

### Lens:

Tempered Clear Flat or SoftLED Flat Glass Lens

### Mounting Options:

Mounts with Side Mount Pole Arm, Adjustable Slipfitter, 2 1/2" Diameter Mounting Arm Adapter, Yoke, Two-Piece Bracket or Easy Hang Wall Bracket (Factory Installed).

### Knight Guard LED:

**Aluminum Metal Core Boards with 2oz Copper Inlay < 2 percent Blue Light**

### Driver:

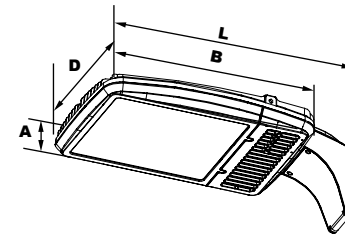
Electronic Driver, 120-277V, 50/60Hz or 347-480V, 50/60Hz (65 & 81w Models Only); Less Than 20% THD and PF>0.90. Standard Internal Surge Protection 6kV. 0-10V Dimming Standard for a Dimming Range of 100% to 10%; Dimming Source Current is 150 Microamps.

### Controls:

Fixtures Ordered with Factory-Installed Photocell or Motion Sensor Controls are Internally Wired for Switching and/or 1-10V Dimming Within the Housing. Remote Direct Wired Interface of 1-10V Dimming is Not Implied and May Not Be Available, Please Consult Factory. Fixtures are Tested with EnviroLux Controls and May Not Function Properly With Controls Supplied By Others. Fixtures are NOT Designed for Use with Line Voltage Dimmers.

### Warranty:

7-Year Warranty for -40°C to +50°C Environment.

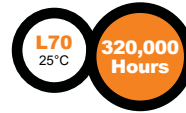


### Dimensions

Width (D)	15 1/4" (400mm)
Length (B)	22" (559mm)
Height (A)	4" (102mm)

### Length with Mount (L)

Side Mount Pole Arm (KH25A): 19 1/4" (491mm)  
Slipfitter (SSF): 18 1/4" (476mm)  
Mounting Arm Adaptor (ALMAA): 19 1/2" (486mm)  
Yoke (KH25Y): 18" (457mm)  
Bracket (SSB): 18 1/4" (476mm)  
Easy-Hang Wall Bracket (KHEH): 16" (406mm)



## Knight Guard Technology

Complete Units Ordering Information

Example: **EES-KH45-F1X180U-KG-CZKH25ASP**

## EES-KH45

Model	Optics/Beams	Wattage	Driver	CCT	Lens	Color	Mounting	Options
		<b>1X180</b> =180w* <b>1X250</b> =250w <b>1X293</b> =293w  *Use with D Optic 3K Model or C & F Optics 4K & 5K Models	<b>U</b> =120-277V <b>H</b> =347-480V*  *65 & 81w Models Only		<b>C</b> =Standard Clear Flat Glass Lens <b>S</b> =SoftLED Flat Glass Lens*  *Type V Models Only	<b>Z</b> =Bronze <b>C</b> =Custom (Consult Factory)	<b>KH25A</b> =Kitty Hawk Arm <b>SSF</b> = Slipfitter ⊙ <b>ALMAA</b> = Mounting Arm Adapter <b>KH25Y</b> =Yoke <b>SSB</b> =Two-Piece Swivel Bracket ⊙ <b>KHEH</b> =Easy-Hang Wall Bracket <b>NM</b> =No Mount	
	<b>A</b> =Type I/NEMA 7H x 5V <b>B</b> =Type II/NEMA 7H x 6V <b>C</b> =Type III/NEMA 7H x 7V <b>D</b> =Type IV/NEMA 6H x 5V <b>F</b> =Type V/NEMA 7H x 7V <b>I</b> =Narrow Beam/NEMA 4H x 4V*			<b>KG</b> =Knight Guard Less Than 2 Percent Blue Light				

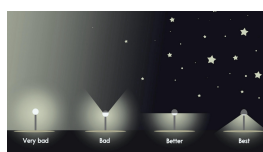
**EES-KH25**=LED Small Slimline Area, Wall, and Flood Light

### Notes

⊙ Maximum tilt angle of 45° above horizontal with R3, R5, or R7 photocell receptacle options

**SF**=Single Fuse\*  
**DF**=Double Fuse\*  
**SP**=Surge Protection  
**M1**=Motion Sensor, IR for mounting heights of 20ft to 35ft  
**M2**=Motion Sensor, IR for mounting heights of 18ft or less  
**R3**=3-Pin Twist Lock Photocell Receptacle ⊙  
**R5**=5-Pin Twist Lock Photocell Receptacle ⊙  
**R7**=7-Pin ANSI C136.41—2013 Twist Lock Photocell Receptacle ⊙  
**S23**=Internal Microwave Sensor with dimming for mounting heights of 25' or less.\*  
**S43**=Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19'.\*

\*120-277V Model Only



Specifications subject to change without notice.

# EES-KH25 Knight Guard Knight Guard LED Large Slimline Area, Wall, and Flood Light



## Additional Mounting Options



**EES-KH45Q Shown with "KH45A" Kitty Hawk Arm,** Kitty Hawk Die-Cast Mounting Arm, Bronze Powdercoat Finish, Includes Hardware. Mounts Directly to Square Poles. Replacement Model KH45AZ.



**EES-KH45Q Shown with "ALMAA" Pole Mounting Arm Adaptor,** Die-Cast Adaptor for 2" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware. Replacement Model ALMAAZ.



**EES-KH45Q Shown with "KH45Y" Yoke,** Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat Finish, Includes Hardware. Replacement Model KH45YZ.



**EES-KH45Q Shown with "SSF" External Mount Slipfitter,** External Mount Die-Cast Adjustable Slipfitter for 2" Tenons, Bronze Powdercoat Finish, Includes Hardware. Replacement Model SSFZ.



**EES-KH45Q Shown with "SSB" Two-Piece Swivel Bracket,** Two-Piece Stamped Steel Adjustable Bracket, Bronze Powdercoat Finish, Includes Hardware. Replacement Model SSBZ.






**EES-KH45Q Shown with "WM" Wall Mount Bracket,** Wall Bracket, Heavy-Duty Stamped Steel, Bronze Powdercoat Finish, Includes Hardware. Replacement Model WBR2Z.



### Notes


- ① Maximum tilt angle of 45° above horizontal with R3, R5, or R7 photocell receptacle options

## EPA (EFFECTIVE PROJECTED AREA) SHOWN WITH LARGE Stealth ARM MOUNTING

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
 1	1.00	33 Lbs

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
 2@180° Mount	2.00	66 Lbs
 2@90° Mount	1.36	66 Lbs

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
 3@90° Mount	2.20	99 Lbs
 3@120° Mount	2.00	99 Lbs

Configuration	EPA (Sq. Ft.)	Weight (Lbs.)
 4@90° Mount	2.20	132 Lbs

## Accessories & Replacement Parts:



Mounting Accessories (Order Separately, Field Installed)	
KH20RPZ	Die-Cast Adaptor for 3" to 5" Round Poles, Bronze Powdercoat Finish. Use with KH25A Kitty Hawk Mounting Arm only.
KH20WMZ	Die-Cast Wall Mount Adaptor, Bronze Powdercoat Finish. Use with KH25A Kitty Hawk Mounting Arm only.
PTSB1SZ	Single Pole Tenon Spoke Bracket, 2" Horizontal Mounting Arm, Bronze Powdercoat Finish, Includes Hardware.
PTSB290SZ	Twin Pole Tenon Spoke Bracket, 2" Horizontal 90° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.
PTSB2180SZ	Twin Pole Tenon Spoke Bracket, 2" Horizontal 180° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.
PTSB390SZ*	Triple Pole Tenon Spoke Bracket, 2" Horizontal 90° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.
PTSB3120SZ*	Triple Pole Tenon Spoke Bracket, 2" Horizontal 120° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.
PTSB490SZ*	Quad Pole Tenon Spoke Bracket, 2" Horizontal 90° Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.
*Non-stock item. Consult factory for lead time.	

Accessories (Order Separately, Field Installed)	
P18131	Twist Lock Non-Shorting (Open) Cap Disconnects Service to Fixture for Temporary or Permanent Disabling (Fixture Always Off). IP65, 480V Maximum.
P18132	Twist Lock Shorting Cap Provides Fixed Service to Fixture (Fixture Always On). IP65, Rated Load 7200w Tungsten.
P18140	110-120VAC Instant Twist Lock Photocell
P18152	277VAC Time Delay Twist Lock Photocell
P18156	120-277VAC Universal Twist Lock Photocell
P18157	480VAC Time Delay Twist Lock Photocell. For 480V use only.
ACCHSG1Z	Die Cast Accessory Housing for Installing Sensors or Other Lighting Control, Bronze Powdercoat Finish.
KH25GSZ	Aluminum Glare/House Side Shield, Bronze Powdercoat Finish, Includes Hardware.
KH25WG	Wire Guard, Stainless Steel Construction, Includes Hardware.
ACCHSG3	Bronze UV-Stabilized Polycarbonate Housing for Installing Sensors, Includes Sensor Bracket and Gasket.
SSBS	Stainless Steel Bird Spikes

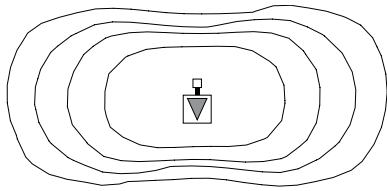
Replacement Parts (Order Separately, Field Installed)	
KH25GL	Tempered Clear Flat Glass Lens.
KH25GLSS	SoftLED Flat Glass Lens
KH25AZ	Kitty Hawk Die-Cast Mounting Arm, Bronze Powdercoat Finish, Includes Hardware. Mounts Directly to Square Poles.
SSFZ	External Mount Die-Cast Adjustable Slipfitter for 2" Tenons, Bronze Powdercoat Finish, Includes Hardware.
ALMAAZ	Die-Cast Adaptor for 2" Horizontal Mounting Arms, Bronze Powdercoat Finish, Includes Hardware.
KH25YZ	Stamped Heavy-Duty Steel Yoke, Bronze Powdercoat Finish, Includes Hardware.
SSBZ	Two-Piece Stamped Steel Adjustable Bracket, Bronze Powdercoat Finish, Includes Hardware.
KHEHZ	Die-Cast Easy-Hang Wall Bracket, Bronze Powdercoat Finish, Includes Hardware.
P17117	Internal Microwave Sensor with Dimming, 120-277VAC, 50/60Hz. See P17117 Specification Page for Details.
P17123	Internally Mounted Microwave On/Off Motion Sensor for Mounting Heights of 8' to 19', 120-277VAC, 50/60Hz

# EES-KH25 Knight Guard Knight Guard LED Large Slimline Area, Wall, and Flood Light

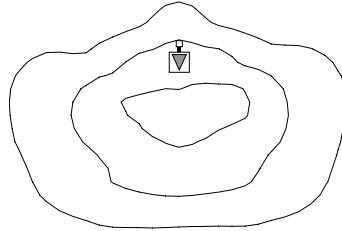


## PHOTOMETRIC DATA

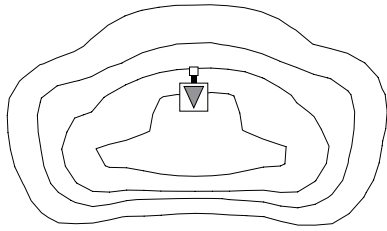
### IES ROADWAY DISTRIBUTION OPTICS



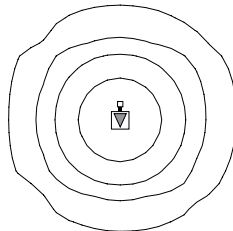
"A" = Type I



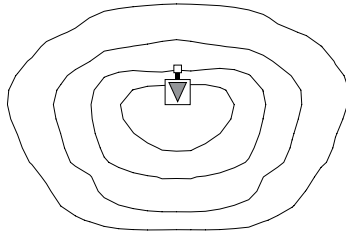
"D" = Type IV



"B" = Type II

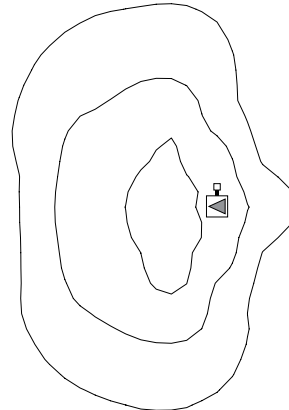


"F" = Type V



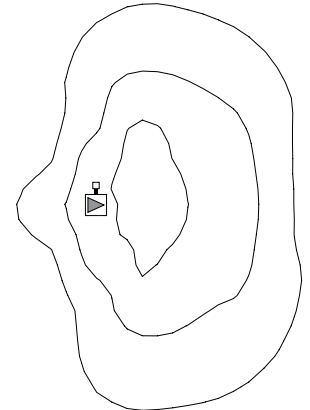
"C" = Type III

Optic Rotated RIGHT

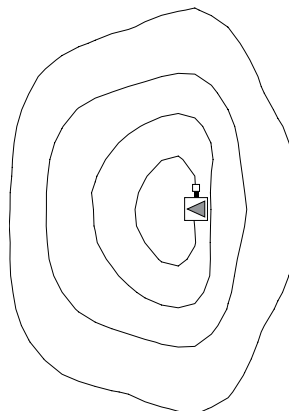


"D" = Type IV  
Mounting RD

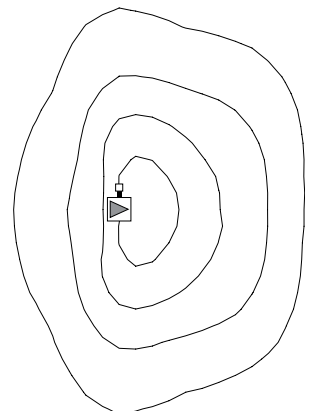
Optic Rotated LEFT



"D" = Type IV  
Mounting LD



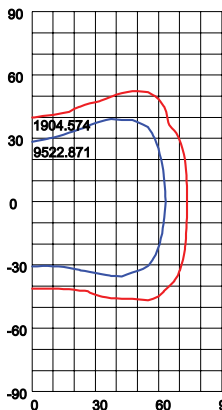
"C" = Type III  
Mounting RD



"C" = Type III  
Mounting LD

AVAILABLE FOR Stealth ARM (KALD, KARD); MOUNTING ARM ADAPTER (MALD, MARD); AND SLIPFITTER (SFLD, SFRD).

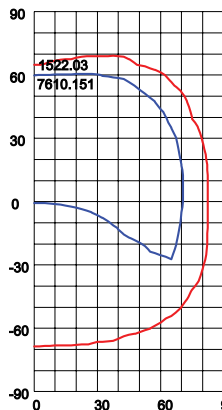
### NEMA FLOOD LIGHT DISTRIBUTION OPTICS



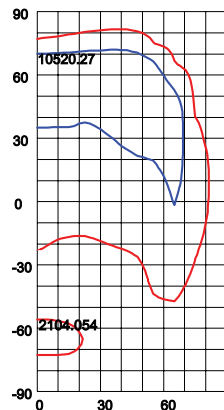
"A" = NEMA 7H x 5V  
256W Max. Candela = 34,471



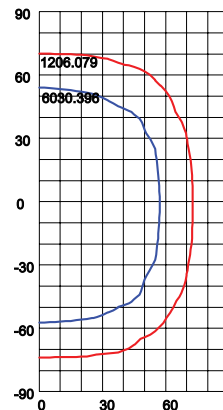
"B" = NEMA 7H x 6V  
256W Max. Candela = 32,884



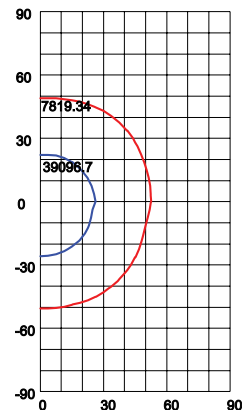
"C" = NEMA 7H x 7V  
256W Max. Candela = 36,926



"D" = NEMA 7H x 6V  
256W Max. Candela = 34,221



"F" = NEMA 7H x 7V  
256W Max. Candela = 34,459



"I" = NEMA 4H x 4V  
293W Max. Candela = 37,035

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## Photometric Performance

LED Board Watts	Drive Current (mA)	Input Watts	Knight Guard < 2 Percent Blue Light						
			Optics		Lumens	LPW	B	U	G
LED 180w	525	180	C	Type III	27,000	150	2	0	2
			D	Type IV	-	-	-	-	-
			F	Type V	27,000	150	2	0	0
LED 250w	525	250	A	Type I	37,500	150	3	0	2
			B	Type II	37,500	150	2	0	2
			C	Type III	37,500	150	2	0	2
			D	Type IV	37,500	150	1	0	2
			F	Type V	37,500	150	3	0	1
LED 293w	525	293	A	Type I	43,950	150	3	0	2
			B	Type II	43,950	150	2	0	2
			C	Type III	43,950	150	3	0	3
			D	Type IV	43,950	150	2	0	3
			F	Type V	43,950	150	3	0	1